

In the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application.

1-5. (Cancelled)

6. (Previously Presented) A bone fixation assembly comprising:

a coupling element having an inner surface defining a first bore coaxial with a first longitudinal axis and a second bore, coaxial with a second longitudinal axis, wherein said first and second longitudinal axes intersect and are in communication with one another; and an anchoring element assembled with said coupling element, said anchoring element having a first end for insertion into bone.

7. (Previously Presented) The assembly of Claim 6 wherein said coupling element has an upper end and a lower end, said first bore extending from said upper end toward said lower end and said second bore extending from said lower end toward said upper end.

8. (Previously Presented) The assembly of Claim 7, wherein said first and second bores are in communication with one another between said upper and lower ends of said coupling element.

9. (Previously Presented) The assembly of Claim 7, wherein said upper end of said coupling element defines a first plane and said lower end of said coupling element defines a second plane, and wherein said first and second planes intersect one another.

10. (Previously Presented) The assembly of Claim 7, wherein said anchoring element projects from said lower end of said coupling element.

11. (Previously Presented) The assembly of Claim 6, wherein said anchoring element is a separate member assembled with said coupling element so that said coupling element and said anchoring element are movable relative to one another.

12. (Previously Presented) The assembly of Claim 7, wherein said second bore includes a seat adjacent said lower end of said coupling element, and wherein said seat is adapted to engage said anchoring element.

13. (Previously Presented) The assembly of Claim 12, wherein said anchoring element has a head having a substantially spherical underside adapted to engage said seat.

14. (Canceled)

15. (Previously Presented) The assembly of Claim 13, wherein said seat has a substantially concave surface adapted to engage the spherical underside of said head.

16. (Canceled)

17. (Previously Presented) The assembly of Claim 13, further comprising a locking element engageable with said coupling element for locking the position of said coupling element with respect to said anchoring element.

18. (Previously Presented) The assembly of Claim 17, wherein said locking element urges a stabilizing rod toward said lower end of said coupling element which in turn forces said head of said anchoring element against said seat for locking said coupling element and said anchoring element from further movement relative to one another.

19. (Previously Presented) The assembly of Claim 18, wherein said seat is defined by an interior wall of said coupling element.

20. (Previously Presented) The assembly of Claim 6, wherein said coupling element has an exterior surface, an upper end and a lower end, said rod-receiving openings extending from said upper end toward said lower end, and wherein said coupling element comprises cuts between said exterior surface and said rod-receiving openings for minimizing the width of said coupling element.

21. (Previously Presented) The assembly as claimed in Claim 6, wherein said anchoring element is a screw fastener having screw threads extending from said first end toward a second end thereof.

22. (Previously Presented) A bone fixation assembly comprising:

a coupling element having an upper end defining a first plane, a lower end defining a second plane, and at least one bore extending from said upper end toward said lower end, wherein said first and second planes intersect one another;

an anchoring element assembled with said coupling element, said anchoring element being adapted for insertion into bone; and

said coupling having a U-shaped opening that extends from the upper end of said coupling element toward the lower end of said coupling element, wherein the U-shaped element is adapted to receive a stabilizing rod.

23. (Previously Presented) The assembly of Claim 22, wherein said coupling element includes at least one bore extending between said upper end and said lower end for receiving said anchoring element.

24. (Previously Presented) The assembly of Claim 22, wherein said coupling element has a seat shaped to allow said coupling element to pivot with respect to said anchoring element.

25. (Previously Presented) The assembly of Claim 24, wherein said anchoring element has a head with a substantially spherical shape and said coupling element has a seat adjacent said lower end thereof, and wherein said spherical head is adapted to engage said seat.

26. (Previously Presented) The assembly of Claim 25, wherein said head has at least one depression adapted to receive a driver for driving said anchoring element into bone.

27. (Previously Presented) The assembly of Claim 25, wherein said anchoring element includes a reduced diameter neck for facilitating pivotal movement of said coupling element with respect to said anchoring element.

28. (Previously Presented) A coupling element having an upper end and a lower end comprising:

a first section extending from said upper end toward said lower end of said coupling element, said first section including a first bore coaxial with a first longitudinal axis;

a second section extending from said lower end toward said upper end of said coupling element, said second section having a second bore coaxial with a second longitudinal axis that intersects said first longitudinal axis;

a U-shaped rod-receiving opening extending from said upper end toward said lower end of said coupling element and being adapted to receive an orthopedic stabilizing rod;

said coupling element having an inner surface defining said first and second bores and a seat adjacent said second bore at said lower end of said coupling element; and

an anchoring element having a first end for insertion into bone and a head spaced from said first end, said head being in contact with said seat of said coupling element.

29. (Previously Presented) The coupling element of Claim 28, wherein said second bore includes a seat adjacent said lower end of said coupling element.

30. (Previously Presented) The coupling element of Claim 29, wherein said seat is adapted to engage a head of an anchoring element secured with said coupling element so that said coupling element and said anchoring element are pivotable relative to one another.

31. (Previously Presented) The coupling element of Claim 30, wherein said seat is adapted to engage an underside of said head of said anchoring element.

32. (Previously Presented) The coupling element of Claim 28, wherein said coupling element has an outer surface with notches for engagement by an instrument for positioning said coupling element with respect to an orthopedic rod.

33. (Previously Presented) A coupling element for a bone fixation assembly comprising:
an upper end defining a first plane;
a lower end defining a second plane;
at least one bore extending between said upper end and said lower end, said at least one bore being adapted to receive an anchoring element, wherein said first plane and said second plane intersect one another;

said coupling element having a U-shaped opening that extends from the upper end of said coupling element toward the lower end of said coupling element, wherein said U-shaped opening is adapted to receive a stabilizing rod.

34. (Previously Presented) The coupling element as claimed in Claim 33, wherein said coupling element has a first bore extending from said upper end toward said lower end and a second bore extending from said lower end toward said upper end, and wherein said first and second bores are angled relative to one another.

35. (Previously Presented) A coupling element for a pedicle screw assembly, comprising:

said coupling including an inner surface having a first section at an upper end of said coupling element, said first section defining a first bore extending through said coupling element that is coaxial with a first longitudinal axis;

the inner surface having a second section at a lower end of said coupling element, said second section defining a second bore extending through said coupling element that is coaxial with a second longitudinal axis, wherein said first and second longitudinal axes intersect one another.

36-39. (Canceled)

40. (Previously Presented) The assembly of Claim 13, wherein said anchoring element includes a neck adjacent said head having a diameter less than the diameter of said threaded portion for facilitating pivotal movement of said coupling element and said anchoring element relative to one another.

41. (Previously Presented) The coupling element of Claim 30, wherein said inner surface includes threads adjacent said upper end thereof for engaging a locking element for securing an orthopedic rod within said rod receiving openings of said coupling element.

42. (Previously Presented) The coupling element of Claim 34, wherein said locking element has external threads adapted for threading into said internal threads of said coupling element.

43-58. (Canceled)

59. (Previously Presented) A bone fixation assembly comprising:

a coupling element for coupling a rod, the coupling element having a first bore coaxial with a first longitudinal axis and a second bore; and

an anchoring element having a first end for insertion into bone and a second end positionable within the second bore, the anchoring element being movable relative to the coupling element in at least a first direction at a first angle relative to the first longitudinal axis and in at least a second direction at a second angle relative to the first longitudinal axis, the second angle being greater than the first angle.

60. (Previously Presented) The bone fixation assembly according to claim 59, further comprising a counterbore formed on the opening plane of the second bore.